



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,158	12/20/2006	Masaaki Inamura	291246US0PCT	8078
22850 7590 09/18/2007 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER MAZUMDAR, SONYA	
			ART UNIT	PAPER NUMBER
			1734	
			NOTIFICATION DATE	DELIVERY MODE
			09/18/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	Application No. 10/580,158	Applicant(s) INAMURA ET AL.	
	Examiner Sonya Mazumdar	Art Unit 1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2006 and 07 July 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/7/2006</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 2, and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (JP 2003-346647) in view of Saruta (US 2003/0197464).

With respect to claim 1, Fujita et al. teach forming a phosphor panel by forming a phosphor pattern (3) on a panel board (4), transferring an adhesive layer (104b) and an overlying smooth resin layer (104a) onto the phosphor pattern via an intermediate film (101) with a mold-release layer (103), removing the intermediate film, depositing a metal film (6) atop the resin layer, and baking the smooth resin and adhesive layers (paragraphs 0018, 0029, 0036, 0038; Drawings 3(1)-3(4)).

However, Fujita et al. do not specifically teach heating the panel board after all layers are formed thereon. Saruta teaches heating a substrate where a phosphor layer is formed (paragraphs 0065, 0068, 0074; Figure 1).

It would have been obvious to one having ordinary skill in the art to heat the laminated substrate, as Saruta taught, and one would have been motivated to do so to provide a more uniform distribution instead of simply focusing on the resin layer (Saruta: paragraphs 0049-0050).

With respect to claim 2, Fujita et al. teach transferring a smooth resin film onto a phosphor pattern while applying heat by a press roller (paragraphs 0031-0033; Drawing 4).

With respect to claim 3, Fujita et al. teach using acrylic resin in a smooth resin layer (paragraph 0018).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

3. Claims 1, 2, and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saruta in view of Suzuki (US 5,893,957)

With respect to claim 1, Saruta teaches forming a phosphor screen by forming a phosphor layer on a substrate, transferring a resin layer onto the phosphor layer via a release film, removing the film, depositing a metal film atop the resin layer, and heating a substrate where a phosphor layer is formed (paragraphs 0017, 0031, 0065, 0068, 0074; Figure 1).

Saruta does not specifically teach adhering a resin layer onto a phosphor layer via an adhesive layer. However, it would have been obvious to one having ordinary skill in the art to teach adhering a resin film to a phosphor layer via an adhesive layer, as Suzuki taught, as it provides strong adhesion between a resin film and a phosphor layer and it is a conventional method used in the art (Suzuki: column 1, line 65 – column 2, line 3).

With respect to claim 2, Saruta teaches using a heated press roller to bond a resin layer onto a phosphor layer (Saruta: paragraph 0079).

With respect to claim 3, Saruta teaches using an acrylic resin as a resin layer (Saruta: paragraph 0079).

4. Claims 4, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saruta in view of Suzuki, as applied to claim 1 above, and further in view of Ito et al. (US 2003/0006696)

With respect to claims 4 and 5, Saruta in view of Suzuki does not specifically teach using a softening agent in a resin film. Ito et al. teach using a resin film comprising at least one kind of softening agent, in a ratio of 1 to 30 wt. %, such as acetyl tributyl citrate and N-butyl benzene sulfonamide (Ito: paragraphs 0012 and 0051).

It would have been obvious to one having ordinary skill in the art to use a softening agent in a resin film, as Ito et al. taught, and would have been motivated to do

Art Unit: 1734

so to prevent crack generation and promote flexibility in a resin film (Ito: paragraphs 0049 and 0050).

With respect to claim 6, Saruta in view of Suzuki and Ito et al. teaches using an adhesive agent of an acrylic type, vinyl acetate resin, or an ethylene-vinyl acetate copolymer (Suzuki: column 7, lines 32-40; Ito: paragraph 0044).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonya Mazumdar whose telephone number is (571) 272-6019. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip Tucker can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/580,158

Page 6

Art Unit: 1734

SM

  
**PHILIP TUCKER**  
**PRIMARY EXAMINER**  
SPE ART UNIT 1734